Assessments in Action

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Session Overview

Standards Based Grading

- Description
- Goal

Formative Assessments

- Description
- Examples
- Teacher instructional responses

Summative Assessments

- Description
- Overview of rubric writing process
- Working with rubrics

Standards Based Grading

Centennial High School – Champaign, IL

*Currently in year 6 of implementation

    *0- to 4-point scale (transitioning to a 4.5-10 scale)

    *scoring guides for all assessments

    *assessments linked to particular standards

    *equally weighted standards in grade calculation

Formative Assessments

Description

* A snapshot of the learning process
* An opportunity to give feedback
* A way for students to critique their work and the work of others

Reasons we give them

* They give students multiple opportunities to develop and practice new skills and understandings.

Instructional Response: Immediate

Examples
* Highlighter activity
* Strategic Grouping w/Exit Slip

Responses
* are most important part
* communicate to students that you care
* allow you to troubleshoot conceptual errors in real time
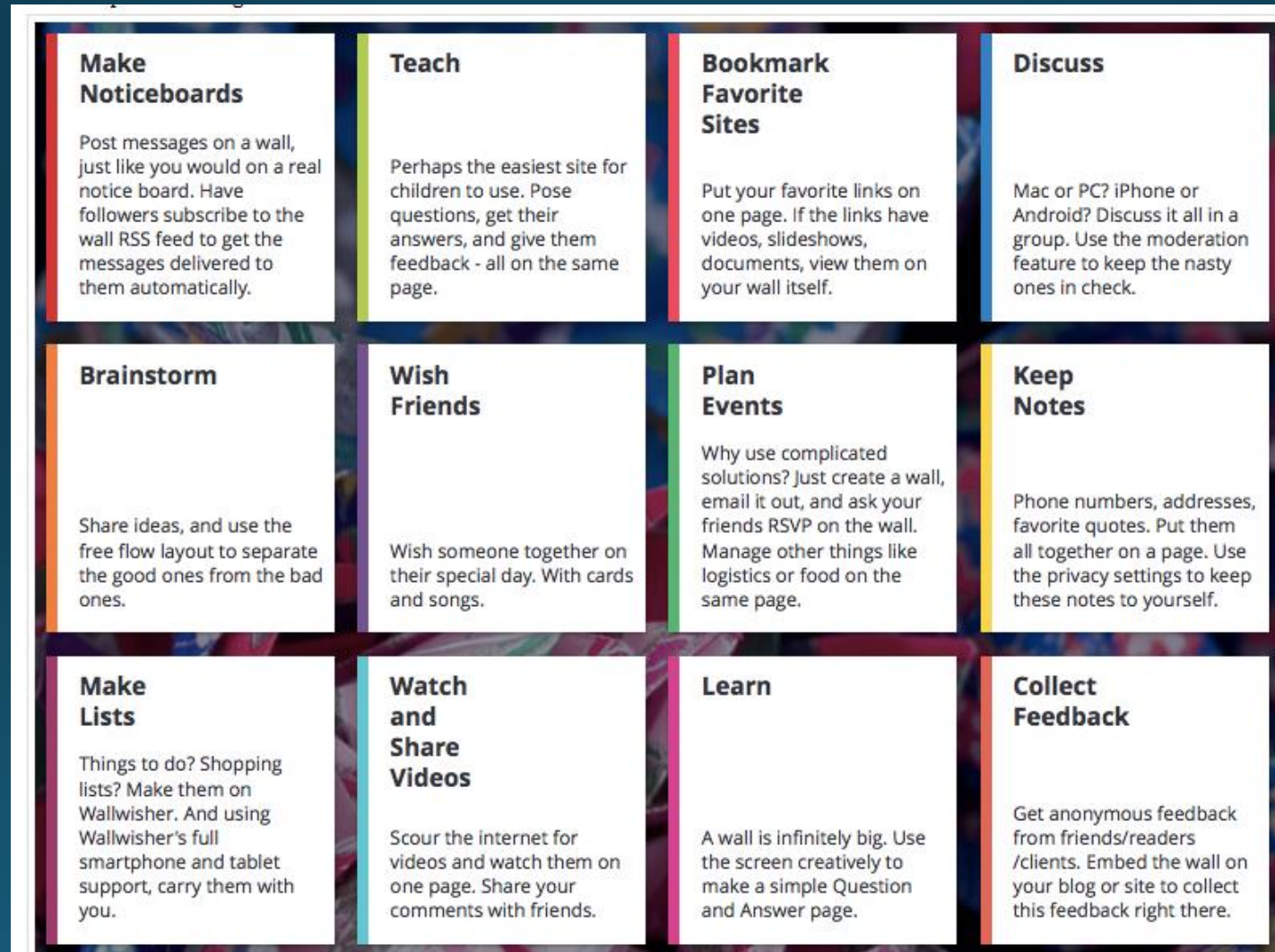* allow you the flexibility to differentiate

Padlet Parking Lot

Make Noticeboards

Post messages on a wall, just like you would on a real notice board. Have followers subscribe to the wall RSS feed to get the messages delivered to them automatically.

Teach

Perhaps the easiest site for children to use. Pose questions, get their answers, and give them feedback - all on the same page.

Bookmark Favorite Sites

Put your favorite links on one page. If the links have videos, slideshows, documents, view them on your wall itself.

Discuss

Mac or PC? iPhone or Android? Discuss it all in a group. Use the moderation feature to keep the nasty ones in check.

Brainstorm

Share ideas, and use the free flow layout to separate the good ones from the bad ones.

Wish Friends

Wish someone together on their special day. With cards and songs.

Plan Events

Why use complicated solutions? Just create a wall, email it out, and ask your friends RSVP on the wall. Manage other things like logistics or food on the same page.

Keep Notes

Phone numbers, addresses, favorite quotes. Put them all together on a page. Use the privacy settings to keep these notes to yourself.

Make Lists

Things to do? Shopping lists? Make them on Wallwisher. And using Wallwisher's full smartphone and tablet support, carry them with you.

Watch and Share Videos

Scour the internet for videos and watch them on one page. Share your comments with friends.

Learn

A wall is infinitely big. Use the screen creatively to make a simple Question and Answer page.

Collect Feedback

Get anonymous feedback from friends/readers /clients. Embed the wall on your blog or site to collect this feedback right there.

Image courtesy of Padlet

Instructional Response: Long-Term

Examples – Algebra 2
* Checkpoints
* Homework quizzes

Responses
* allow you to adjust instruction over time as needed
* allow students to track progress and recognize needs
* allow flexibility in assessing different topics

My goal for this semester:

How I will achieve this goal:

Standard:				
10				
8.5				
6.5				
4.5				
0				
Date				

Standard:				
10				
8.5				
6.5				
4.5				
0				
Date				

Standard:				
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10/15 Standard 4.1
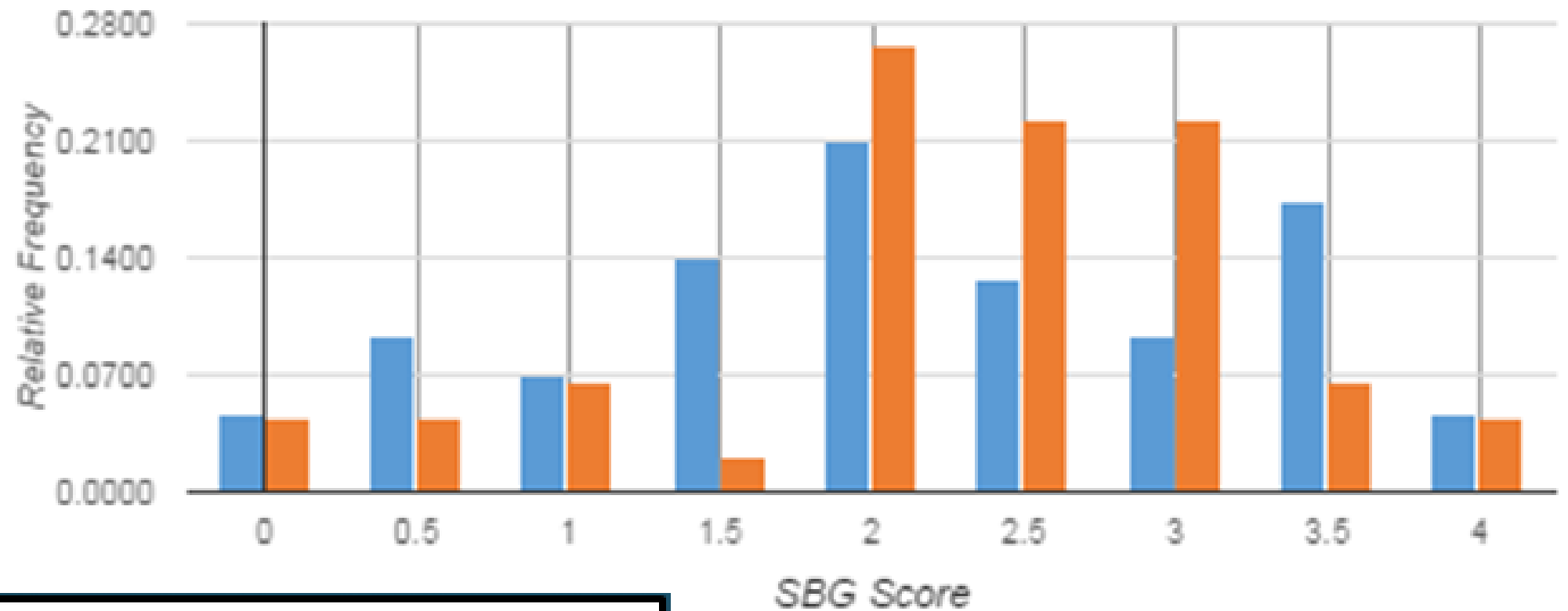
4.1	FRL-Y	FRL-N	p-value
Mean	2.140	2.289	0.4164
Stdev	1.088	0.934	0.2665

Summative Assessments

Train of thought...

1st Decide standards to assess using assessment guide

2nd Look through CCSS and PARCC to see what is needed to meet/exceed the standard.

3rd Seek advice from students on rubric.

4th Meet as a course-alike team and create the rubric.

5th Select questions that correlate to rubric.

Summative Assessments

Practice Grading Algebra 2 Test

* Discussion with colleagues cannot be stressed enough!

* This is a judgment-free zone!

SAMPLE #1

Standard	Mastery/Exceeds: 10	Proficient/Meets: 8.5	Partially Meets: 6.5	Does Not Meet: 4.5
5.2: Analyze functions using different representations.	• Student meets the criteria for an 8.5. • Student can interpret a parameter (the slope). • Student can extend the problem to a different situation (part d).	• Student correctly creates a table, an equation, and a graph.	• The student correctly constructs two representations.	• The student correctly constructs one representation.

1.) You are working in a lab that studies mold growth on bread. You are interested in how the size of a region of mold grows over time. For a certain specimen, you begin with a roughly circular moldy region with a diameter of 1.5 cm. The diameter of the moldy region appears to be growing by about 0.5 cm each day.

a) Construct a table of data for the diameter of the moldy region for the first 6 days (starting at x = 0 days). Make a plot of your data on the grid provided. Let x represent time (in days) and y represent the diameter of the moldy region. Be sure to label each axis.

x	y
0	1.5
1	2
2	2.5
3	3
4	3.5
5	4
6	4.5

b) Write an equation that describes the mold diameter at any time.

$$Y = 1.5 + 0.5x$$
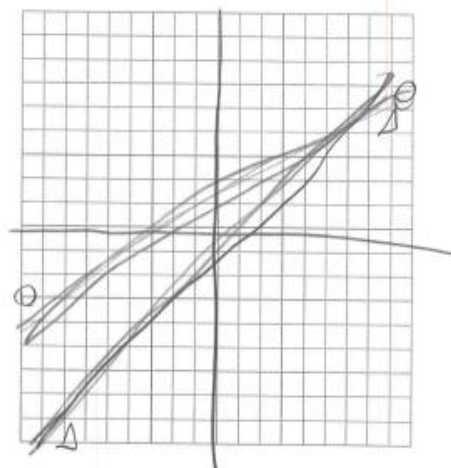
c) Identify the slope for your equation in part (b). Explain that the slope means in this context (situation).

$$\left(1, 0.5\right)$$

d) Another moldy region begins with a diameter of 0.5 cm and appears to _double_ in diameter each day. Construct a table of data for the diameter of this moldy region for the first 4 days (starting at x = 0 days). Plot the data on the same graph, using a different symbol (like a triangle) or color for the points.

x	y
0	0
1	1
2	2
3	3
4	4

SAMPLE #2

Standard	Mastery/Exceeds: 10	Proficient/Meets: 8.5	Partially Meets: 6.5	Does Not Meet: 4.5
5.2: Analyze functions using different representations.	• Student meets the criteria for an 8.5. • Student can interpret a parameter (the slope). • Student can extend the problem to a different situation (part d).	• Student correctly creates a table, an equation, and a graph.	• The student correctly constructs two representations.	• The student correctly constructs one representation.

1.) You are working in a lab that studies mold growth on bread. You are interested in how the size of a region of mold grows over time. For a certain specimen, you begin with a roughly circular moldy region with a diameter of 1.5 cm. The diameter of the moldy region appears to be growing by about 0.5 cm each day.

a) Construct a table of data for the diameter of the moldy region for the first 6 days (starting at x = 0 days). Make a plot of your data on the grid provided. Let x represent time (in days) and y represent the diameter of the moldy region. Be sure to label each axis.

0	1	2	3	4	5	6
1.5	2	2.5	3	3.5	4	4.5

b) Write an equation that describes the mold diameter at any time.

$$x = .875$$
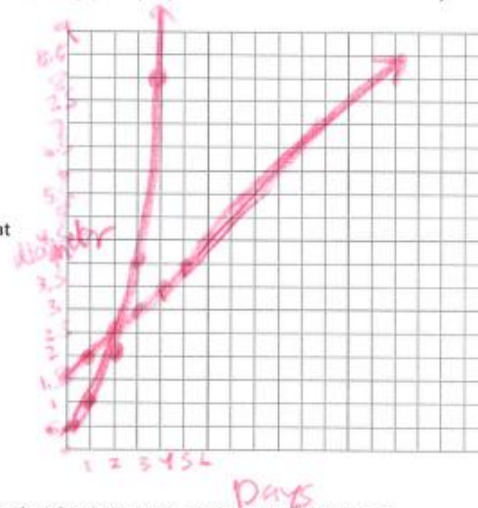
$$y = x \text{ times } 875$$

c) Identify the slope for your equation in part (b). Explain that the slope means in this context (situation).

$$\frac{1}{1} = 1 \qquad \frac{1}{.5}$$

d) Another moldy region begins with a diameter of 0.5 cm and appears to __double__ in diameter each day. Construct a table of data for the diameter of this moldy region for the first 4 days (starting at x = 0 days). Plot the data on the same graph, using a different symbol (like a triangle) or color for the points.

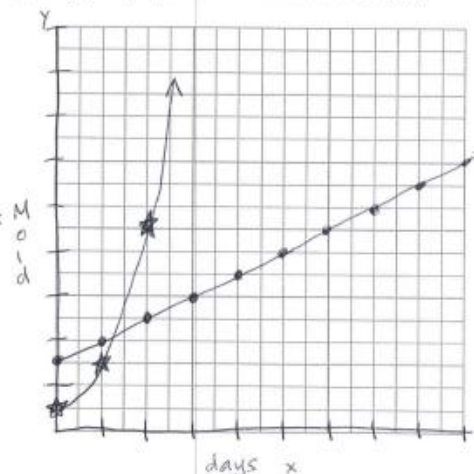| 0	1	2	3	4	5	6
0.5	1	2	4	8	16	

Standard	Mastery/Exceeds: 10	Proficient/Meets: 8.5	Partially Meets: 6.5	Does Not Meet: 4.5
5.2: Analyze functions using different representations.	• Student meets the criteria for an 8.5. • Student can interpret a parameter (the slope). • Student can extend the problem to a different situation (part d).	• Student correctly creates a table, an equation, and a graph.	• The student correctly constructs two representations.	• The student correctly constructs one representation.

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a) Construct a table of data for the diameter of the moldy region for the first 6 days (starting at $x = 0$ days). Make a plot of your data on the grid provided. Let x represent time (in days) and y represent the diameter of the moldy region. Be sure to label each axis.

x	Y
0	1.5
1	2
2	2.5
3	3
4	3.5
5	4

b) Write an equation that describes the mold diameter at any time.

$$Y = 0.5x + 1.5$$

c) Identify the slope for your equation in part (b). Explain that the slope means in this context (situation).

its a linear line. it means that the mold is growing at a constant steady rate

d) Another moldy region begins with a diameter of 0.5 cm and appears to double in diameter each day. Construct a table of data for the diameter of this moldy region for the first 4 days (starting at $x = 0$ days). Plot the data on the same graph, using a different symbol (like a triangle) or color for the points.

x	Y
0	.5
1	1.5
2	4.5
3	9.5
4	16.5
5	25.5

Polleverywhere.com

Ask a question

Use multiple choice questions to identify gaps in understanding, or kick off group discussions with a colorful word cloud.

Collect live responses

Invite the audience to respond simultaneously by visiting a website or texting a number on their phones.

See instant results

Responses appear in an animated graph or chart embedded in your presentation. Results update live for all to see.

Summative Assessments

Rubric Writing

* Rubrics are the mechanism for judging the quality of student work.

* They define complex learning targets and the features of work that constitute quality.

* They ensure judgements about student work are consistent over time between assignments and with other teachers.

Summative Assessments

Rubric Writing...
* ...is about scoring holistically

* ...is NOT about assigning points to the questions and converting it to a 10, 8.5, 6.5, 4.5

Helpful Hints for Rubrics

Coverage & Clarity

*Choose characteristics of student work that shows evidence of learning.

*Description should be clear, concise & consistent from level to level.

*Transparency is key!

Summative Assessments

Creating a Rubric
* Choose one of the standards below.
* Work in small groups to create a rubric

1. Pre-Calculus Standard: Model periodic phenomena with trigonometric functions.

2. Algebra 2 Standard: Interpret functions that arise in applications in terms of the context.

3. Geometry Standard: Perform transformations

Pre-Calculus Standard: Model periodic phenomena with trigonometric functions.

	4	3	2	1
8.2 Trigonometric Functions Model periodic phenomena with trigonometric functions.	Given a situation that has a periodic structure, be able to model it with a trigonometric function. Explain in clear and concise detail the reasoning for such a model.	Given a situation that has a periodic structure, be able to model it with a trigonometric function.	Given a situation that has a periodic structure, attempt to model it with a trigonometric function. Several errors are present but at least half of the function is correct.	Given a situation that has a periodic structure, attempt to model it with a trigonometric function. Many errors are present and less than half of the structure is correct.

Algebra 2 Standard: <u>Interpret functions that arise in applications in terms of the context.</u>

Standard				
	1	**2**	**3**	**4**
7.2 Interpret Models in Context:	Attempts to build functions that model mathematical and contextual situations, and uses the models to solve, interpret and/or generalize about problems. Major errors appear.	Builds functions that model mathematical and contextual situations, and uses the models to solve, interpret and/or generalize about problems. Many minor errors appear or some major errors.	Builds functions that model mathematical and contextual situations, and uses the models to solve, interpret and/or generalize about problems. Some minor errors in calculation appear.	Builds functions that model mathematical and contextual situations, including those that require **multiple** functions (both current and prior skills utilized) and uses the models to solve, interpret and/or generalize about problems.

Geometry Standard: Perform transformations

Standard	1	2	3	4
1.1 Perform Transformations	Given a figure and a transformation, partially draw the transformed figure.	Given a figure and a transformation, draw the transformed figure. Specifies a single transformation that will carry a figure onto another.	Given a figure and a transformation, draw the transformed figure. Specify a sequence of transformations that will carry a figure onto itself or another.	Given a figure and a sequence of transformations, draw the transformed figure. Uses precise geometric terminology to specify more than one sequence of transformations that will carry a figure onto itself or another.

Sources

How to Create and Use Rubrics
    by Susan M. Brookhart

Assessment and Student Success in a Differentiated Classroom
    by Carol Ann Tomlinson & Tonya R. Moon